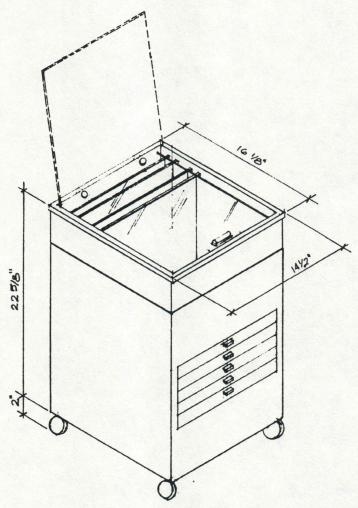
THE CONSTRUCTION PROCESS

ENGINEERING RATIONALE, DESCRIPTION AND SPECIFICATIONS

ROLLING FILE CABINET

ROLLING FILE CABINET

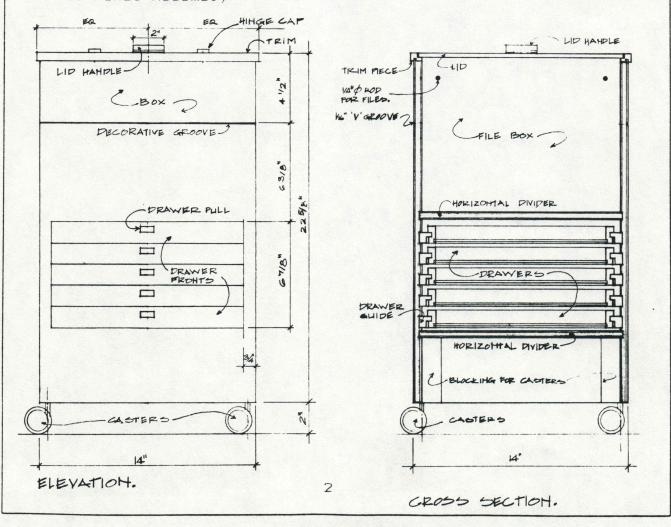


The rolling file cabinet is a moveable personal filing cabinet which is low enough to fit under most tables and is "petite" so that it does not occupy a large space within the office. It comes with a filing box in the upper portion of the cabinet, which has a hinged top made of a clear transparent acrylic so that a person can survey their files at a glance. The lower portion of the cabinet is fitted with drawers which can store papers and other objects that are not well suited to storage in a conventional file.

The rolling file cabinet is available in one standard size. The customer options available are; 1) choice of finish (lacquer, melamine, aniline dye with varnish) and 2) number and depth of drawers (for example, five one inch deep drawers or three drawers, one of which is one inch in depth and the other two are two inches in depth, or other combinations).

The process for making the rolling file cabinet is described as a series of sub-assemblies:

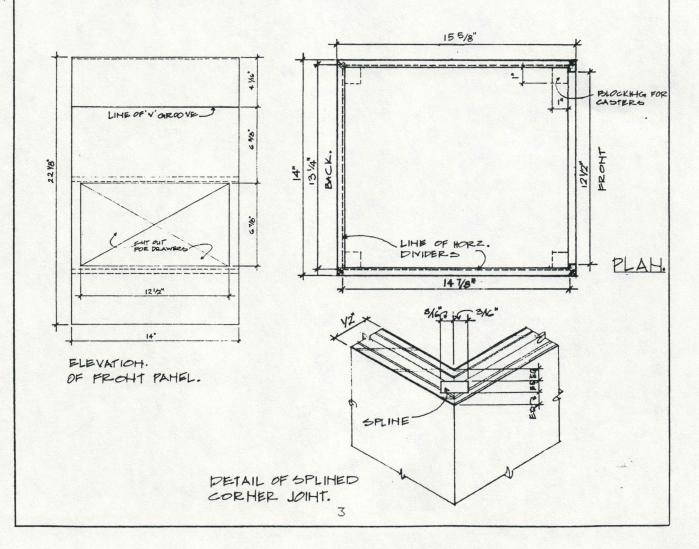
- 1. The Box
- 2. The Trim
- 3. The Lid
- 4. The Drawers
- 5. Final Assembly



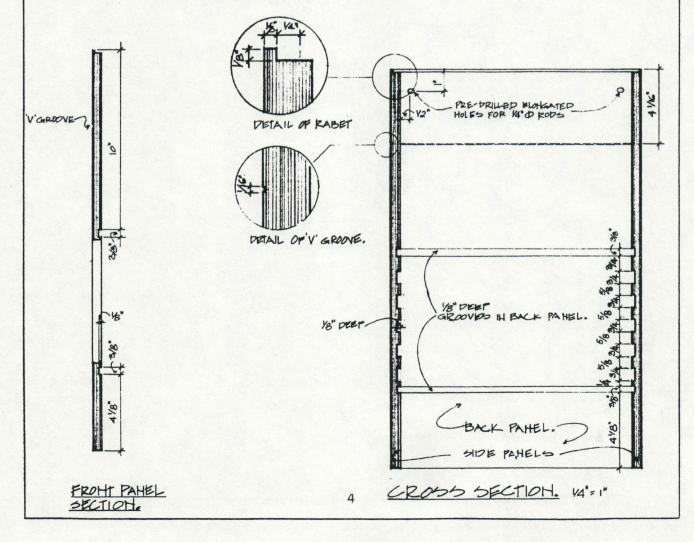
I. THE BOX

The box of the rolling file cabinet consists of the front panel, two side panels, the back panel and two horizontal dividers. The entire assembly is made from plywood and is fitted together with splined miters to form a rigid structure that will show no end grain in the final piece.

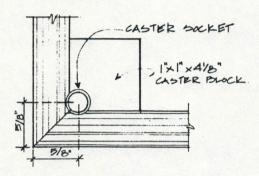
- 1. Cut the front, back and two side panels from 1/2" finish birch plywood. All vertical edges to be cut at a 45 degree miter, with groove for spline as shown.
- 2. Cut the opening for the drawers in the front panel as shown. Cut the horizontal dividers out of 3/8" plywood. (Refer section Pg. 2)



- 3. Run a decorative, forty five degree, "V" groove on the outside of each panel as shown.
- 4. Run the grooves for the two horizontal dividers on the inside of each of the four panels as shown.
- 5. Depending on the drawer arrangement specified by the customer, run the grooves for the drawer guides in the two side panels as shown.
- 6. Cut the rabbet to receive the trim in the top edge of each panel as shown.
- 7. Drill the holes for the hanging file folder rods in the front and back panels.



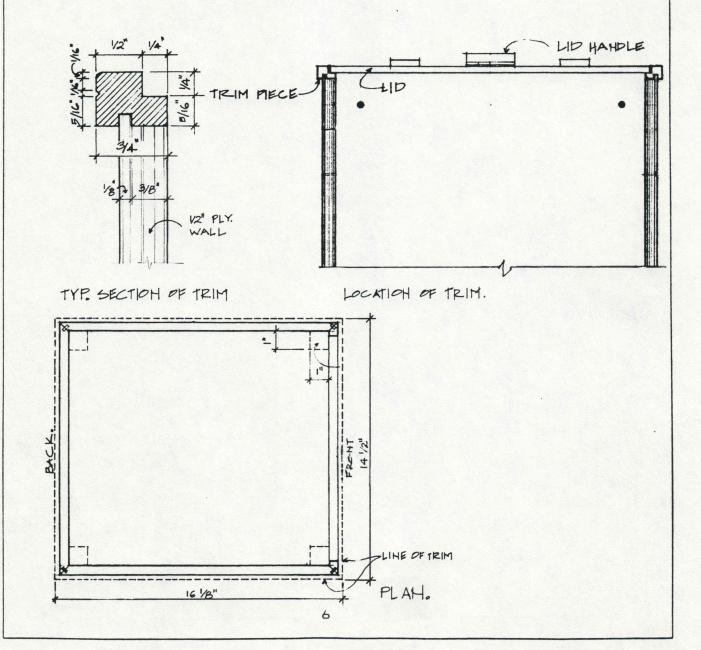
8. For stability when attempting to roll the cabinet on carpet, the casters are set as far to the outside as possible. Cut the caster blocks as shown and install into the base of the cabinet. Drill the holes for the caster sockets after the caster blocks are glued in place. (Refer to plan and section Pg 2 and 3 for location of caster blocks).



9. Sand all exterior surfaces and interior of file box with #120 sandpaper. For the melamine or lacquer finishes prime all exterior surfaces with high build surfacer primer. For the aniline dye finish, wet the exposed surfaces with water and allow to dry. Sand all of the prepared surfaces with #220 sandpaper. Finish the inside of the file box with two coats of sanding sealer and two coats of clear lacquer.

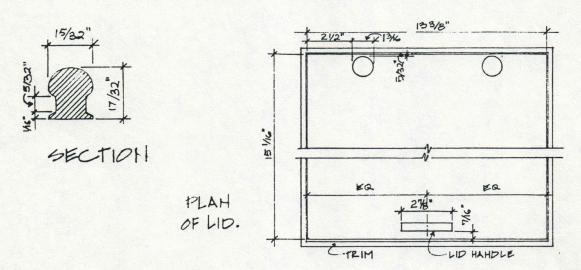
II. THE TRIM

- 1. Mill the section for the trim out of solid birch and cut to length with 45 degree miters.
- 2. Sand and prepare for final finish by priming or wetting with water depending on the type of finish requested.



III. THE LID

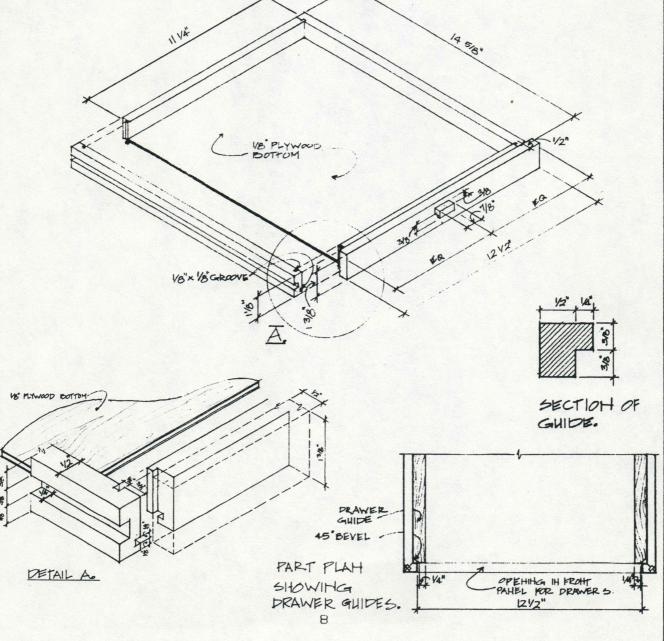
- 1. Cut the lid to size out of 1/4" clear acrylic sheet. If a shaper is used for this process, it should not be necessary to flame the edges. Drill holes in the back of the lid to receive #1614 McMurry Pacific free swinging hinges.
- 2. Shape the section for the lid handle out of a $5/8" \times 1/2"$ section of clear acrylic. Gut the handle to length and attach to the lid with heavy body acrylic cement.



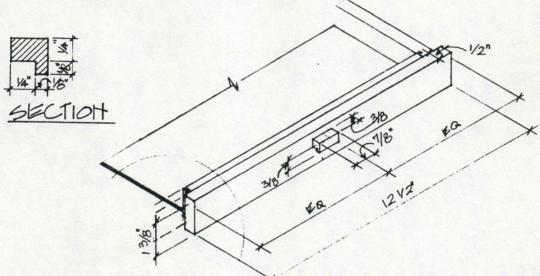
IV. THE DRAWERS

1. Mill the stock for the sides of the drawers out of solid birch. Cut the sections to length and cut rabbets and dados for the corner joints as shown. Cut the bottom of the drawer out of 1/8" birch plywood.

2. Mill the section for the drawer guides out of solid oak. Cut the guides to length and bevel the front of each as shown.



3. Mill the stock for the drawer fronts and the drawer pulls. Cut the fronts to length with a 5 degree bevel at each end. Cut the pulls to length, and attach with aliphatic resin. Prepare the fronts and pulls for final finish depending on type of finish specified.

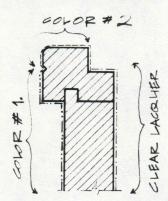


- 4. Drill the holes for the screws in the inner front wall of the drawers with sufficient play to allow for some adjustment when positioning the drawer front.
- 5. Assemble all of the pieces of the drawers except for the drawer fronts.

V. FINAL ASSEMBLY/FINISHING

Prior to this stage all of the individual subassemblies should have been built and prepared for final finishing by either priming, or wetting and sanding.

- 1. Glue the trim pieces to the box. (Refer to section Pg. 6)
- 2. Glue the drawer guides into the box.
- 3. Apply final finish to the box and trim by either spraying two coats of acrylic lacquer, spraying one coat of melamine, or brushing one coat of aniline dye followed by two coats of clear varnish. The box will receive color #1 and the trim will receive color #1 and #2. Paint breaks are shown below.



PAINT BREAKS FOR TRIM.

- 4. Apply final finish to the drawer pulls (color #3) and to the drawer fronts (color #1). Attach the pulls to the drawer fronts with glue and a #5 wood screw.
- 5. Insert two 1/4" diameter stainless steel rods for the hanging files inside the file portion of the cabinet. Install into the oversized hole first and then into the 1/4" hole. Apply a small amount of "hot glue" to the holes at the ends of the rods to keep them in position.
- 6. Attach the lid to the box with two #1614 McMurry Pacific free swinging hinges.

- 7. Place the drawers in the cabinet and install the drawer fronts. Use two #8 \times 3/4" wood screws and adjust the fronts until a good fit is achieved.
- 8. Install 2" Shepherd Ball Casters into the caster blocks at the base of the cabinet.